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ATTEN: IAN L. CARTIER
NOKIA, INC.
313 FAIRCHILD DRIVE
MOUNTAIN VIEW, CA 94043

EXAMINER

BURGESS, BARBARA N

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/745,289	ROMERO ET AL.
	Examiner	Art Unit
	Barbara N. Burgess	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 04 January 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 and 16-42 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-14 and 16-42 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

This Office Action is in response to Amendments filed January 4, 2005. Claim 15 is cancelled as requested by Applicants. Claims 1-14, 16-39 are presented for further examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-15, 17-25, 30-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz (US Patent No. 6,446,066 B1) in view of Wexler et al. (hereinafter "Wexler", 6,298,357 B1).

As per claims 1, 38-39, Horowitz discloses a method, apparatus, and machine-readable program comprising:

- Receiving a machine readable file containing a document that is to be served to a client for display on a client device, the organization of the documents in the file being expressed as a hierarchy of information (column 2, lines 17-25, column 3, lines 1-15).

Horowitz does not explicitly discloses:

- Deriving subdocuments from the hierarchy of information, each of the subdocuments being expressed in a format that permits it to be served separately to the client, at least one to the subdocuments containing information that enables it to be linked to another one of the subdocuments.

However, the use and advantages for deriving subdocuments from the hierarchy of information, each of the subdocuments being expressed in a format that permits it to be served separately to the client using a hypertext transmission protocol, at least one to the subdocuments containing information that enables it to be linked to another one of the subdocuments is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 30-35, column 2, lines 20-25, column 3, lines 12-15, 50-56, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate deriving subdocuments from the hierarchy of information, each of the subdocuments being expressed in a format that permits it to be served separately to the client using a hypertext transmission protocol, at least one to the subdocuments containing information that enables it to be linked to another one of the subdocuments in Horowitz's method in order for smaller files to be easily downloaded and viewed using a web browser.

As per claim 3, Horowitz discloses the method of claim 1 in which the deriving comprises traversing the hierarchy and assembling the subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments (column 3, lines 1-45).

As per claim 4, Horowitz discloses the method of claim 3 in which the assembling conforms to an algorithm that tends to balance the respective sizes of the sub-documents (column 3, lines 30-36).

As per claim 5, Horowitz further discloses the method of claim 3 in which the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from the segments that have common parents in the hierarchy (column 4, lines 21-50).

As per claim 6, Horowitz discloses the method of claim 3, in which the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from segments for which replications of nodes in the hierarchy is not required (column 4, lines 61-67).

As per claim 7, Horowitz discloses the method of claim 1 in which the file is received from an origin server associated with the file (column 2, lines 16-30).

As per claim 8, Horowitz discloses the method of claim 7 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the deriving of subdocuments includes first converting the file to a language that organized segments of the document in a hierarchy (columns 3-4).

As per claims 9, Horowitz discloses the method of claim 1 also including serving the subdocuments to the client individually as requested by the client (column 4, lines 22-30).

As per claims 10, 18, 22, Horowitz does not explicitly disclose the method of claims 9, 17, and 22 in which the subdocuments are served to the client using a hypertext transmission protocol.

However, the use and advantages for the subdocuments are served to the client using a hypertext transmission protocol is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 55-60, column 3, lines 51-55, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate subdocuments are served to the client using a hypertext transmission protocol in Horowitz's method in order for the smaller files to be easily downloaded.

As per claim 11, Horowitz does not explicitly discloses the method of claim 9 in which the subdocuments are requested by the client based on contained information that enables it to be linked to another of the subdocuments.

However, the use and advantages for the subdocuments are requested by the client based on contained information that enables it to be linked to another of the subdocuments is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 6, lines 60-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the subdocuments are requested by the client based on contained information that enables it to be linked to another of the subdocuments in Horowitz's method in order to flow naturally from one document to the next.

As per claims 12, Horowitz discloses the method of claim 1 also including

- Identifying a portion of the document that is to be displayed separately from the rest of the document (column 3, lines 1-15),
- The portion of the document that is to be displayed separately being excluded from the subdocument in which the portion would otherwise have appeared, the portion of the document that is to be displayed separately being included in at least one corresponding sub
- When the subdocument in which the portion would otherwise have appeared is served to the client (column 4, lines 38-40).

As per claims 13, Horowitz discloses a method comprising

- Receiving, from an origin server, a machine readable file containing a document that is to be served to a client for display on a client device, the file being expressed in a language that does not organize segments of the document in a hierarchy,
- Converting the file to a language that organizes segments of the document in a hierarchy,
- Traversing the hierarchy and assembling subdocuments from the segments, at least some of the subdocuments each being assembled from more than one of the

segments, the assembling conforming to an algorithm that tends to (a) balance the respective sizes of the sub-documents, (b) favor assembling each of the subdocuments from segments that have common parents in the hierarchy, and (c) assemble the subdocuments from segments for which replications of nodes in the hierarchy is not required (columns 3-4).

Horowitz does not explicitly discloses:

- At least one of the subdocuments being expressed in a format that permits it to be served separately to the client, at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments,
- Serving the subdocuments to the client individually as requested by the client based on the contained information that enables it to be linked to another of the subdocuments.

However, the use and advantages for using a hypertext transmission protocol is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 55-60, column 3, lines 51-55, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate subdocuments are served to the client using a hypertext transmission protocol in Horowitz's method in order for the smaller files to be easily downloaded.

As per claim 14, Horowitz discloses a machine-readable document held on a storage medium for serving to a client, the document being organized as a set of subdocuments (columns 3-4).

Horowitz does not explicitly disclose at least one of the subdocuments containing information that enables the subdocument to be linked to another of the subdocuments, the information enabling the subdocument to be linked comprising a URL, the subdocuments comprising an assembly of segments of the document that are a part of a hierarchical expression of the document, the subdocuments being of approximately the same size.

However, the use and advantages for using a hypertext transmission protocol is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 55-60, column 3, lines 51-55, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate subdocuments are served to the client using a hypertext transmission protocol in Horowitz's method in order for the smaller files to be easily downloaded.

As per claim 17, Horowitz discloses a method comprising:

- Receiving from a client a request for a document to be displayed on a client device;

Horowitz does not explicitly disclose:

- Serving separately to the client a subdocument that represents less than all of the requested document, the subdocument containing information that links it to at least one other subdocument;
- Receiving from the client an invocation of the link to the other subdocument, and serving separately to the client device the other subdocument.

However, the use and advantages for using a hypertext transmission protocol is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 55-60, column 3, lines 51-55, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate subdocuments are served to the client using a hypertext transmission protocol in Horowitz's method in order for the smaller files to be easily downloaded.

As per claim 19, Horowitz discloses the method of claim 17 in which the subdocuments are of essentially the same length (column 3, lines 1-9)

As per claim 21, Horowitz discloses a method comprising:

- Receiving from a server at a client device, a subdocument of a larger document for display on the client device (columns 3-4);
- Displaying the subdocument on the client device (column 3, lines 35-40);
- Receiving at the client device a request of a user to have displayed another subdocument of the larger document (column 4, lines 15-23);

- Receiving separately from the server at the client device, the other subdocument (column 3, lines 40-40);
- Displaying the other subdocument on the client device (column 3, lines 35-40);
- The subdocument being of substantially the same length (column 3-4).

As per claim 23, Horowitz does not explicitly disclose the method of claim 21 in which the request of the user is expressed as a URL.

However, the use and advantages for using a hypertext transmission protocol is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 55-60, column 3, lines 51-55, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate subdocuments are served to the client using a hypertext transmission protocol in Horowitz's method in order for the smaller files to be easily downloaded.

As per claim 24, Horowitz discloses the method of claim 21 in which all of each of the subdocuments is displayed at one time on the client device (column 4, lines 46-52).

As per claim 25, Horowitz discloses the method of claim 21 in which less than all of each of the subdocuments is displayed on the client device at one time (column 4, lines 46-52).

As per claim 30, Horowitz discloses the method 1, 17, or 21 in which the subdocuments are derived from the document at the time of a request from the client device for the document (column 3, lines 45-55).

As per claim 31, Horowitz discloses the method of claim 30 in which the subdocuments are derived in a manner that is based on characteristics of the client device (column 3, lines 13-22)

As per claims 32-33, Horowitz discloses the method of claim 31 in which the characteristics of the client device are provided by the client in connection with the request (column 2, lines 59-67).

As per claim 34-36, discloses method of claim 1, 17, or 21, Horowitz discloses in which the subdocuments are derived from the document before the client requests the document from the server (columns 3-4).

As per claims 37-39, Horowitz does not explicitly disclose apparatus and machine-readable medium comprising at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments. However, the use and advantages for using a hypertext transmission protocol is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Wexler (column 1, lines 55-60, column 3, lines 51-55, column 6, lines 64-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate subdocuments are served to the client using a hypertext transmission protocol in Horowitz's method in order for the smaller files to be easily downloaded.

As per claim 40, Horowitz discloses the method of claim 7 in which the file comprises an electronic document (column 3, lines 24-33)

As per claim 41, Horowitz discloses the method of claim 7 in which the file comprises an email file (column 4, lines 33-42).

As per claim 42, Horowitz discloses the method of claim 7 in which the file is received from the origin sever in the form of a webpage (column 4, lines 55-64).

3. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz (US Patent No. 6,446,066 B1) in view of Wexler et al. (hereinafter "Wexler", 6,298,357 B1) and in further view of Burkett et al. (hereinafter "Burkett", 6,671,853 B1).

As per claims 2, 16, Horowitz, in view of Wexler, does not explicitly discloses the method of claim 1 in which the hierarchical expression language comprises extensible mark-up language (XML).

However, the use and advantages for the language comprises extensible mark-up language (XML) is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Burkett (Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate for the language comprises extensible mark-up language (XML) in Horowitz's method in order to more efficiently process the document by selectively streaming document fragments.

4. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz (US Patent No. 6,446,066 B1) in view of Wexler et al. (hereinafter "Wexler", 6,298,357 B1) and in further view of Shklar et al. (hereinafter "Shklar", US Patent No. 6,253,239 B1).

As per claim 26, Horowitz, in view of Wexler, does not explicitly disclose a method displaying an icon with the subdocument and in response to invocation of the icon, fetching another subdocument of the document from a server.

However, in an analogous art, Shklar discloses a set of objects are indicated by a stack of icons (column 6, lines 8-14).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Shklar's icons in Horowitz's method in order to represent a file stored.

As per claim 27, Horowitz discloses the method of claim 26 in which only a portion of each of the subdocuments is displayed at one time (column 4, lines 46-52).

As per claim 28, Horowitz discloses the method of claim 27 also including displaying an indication of the position of the currently displayed subdocument in a series of subdocuments that make up the document (column 4, lines 15-30).

As per claim 29, Horowitz discloses the method of claim 28 in which the indication includes the total number of subdocuments in the series and the position of the currently displayed document in the sequence (column 3-4).

Response to Arguments

The Office notes the following arguments:

- (a) Horowitz and Wexler cannot be combined to teach the claimed invention of independent claim 1.
- (b) Horowitz nor Wexler teach or suggest a subdocument or a document along with an icon, and in response to invocation of the icon, fetching another subdocument.

In response to:

- (a) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

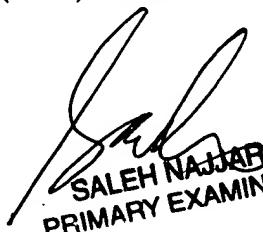
(b) Applicant's argument has been considered but is moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N. Burgess whose telephone number is (571) 272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SALEH NAJJAR
PRIMARY EXAMINER

Barbara N Burgess
Examiner
Art Unit 2157